

Senator Howard A. Stephenson proposes the following substitute bill:

COMPUTER SCIENCE INITIATIVE FOR PUBLIC SCHOOLS

2016 GENERAL SESSION

STATE OF UTAH

Chief Sponsor: Howard A. Stephenson

House Sponsor: Bradley G. Last

LONG TITLE

General Description:

This bill enacts provisions regarding computer science instruction in public schools.

Highlighted Provisions:

This bill:

- ▶ defines terms;
- ▶ creates the computer science initiative;
- ▶ requires the STEM Action Center Board and the State Board of Education to collaborate to develop and implement the initiative; and
- ▶ requires the STEM Action Center Board to include information on the initiative in the board's annual report to the Education Interim Committee.

Money Appropriated in this Bill:

This bill appropriates:

- ▶ to the State Board of Education - State Office of Education - Initiative Programs, as an ongoing appropriation:
 - from the Education Fund, \$630,000; and
- ▶ to the Governor's Office of Economic Development - STEM Action Center, as an ongoing appropriation:
 - from the General Fund, \$140,000.



Other Special Clauses:

This bill provides a special effective date.

Utah Code Sections Affected:

ENACTS:

63N-12-213, Utah Code Annotated 1953

Be it enacted by the Legislature of the state of Utah:

Section 1. Section **63N-12-213** is enacted to read:

63N-12-213. Computer science initiative for public schools.

(1) As used in this section:

(a) "Computational thinking" means the set of problem-solving skills and techniques that software engineers use to write programs that underlie computer applications, including decomposition, pattern recognition, pattern generalization, and algorithm design.

(b) "Computer coding" means the process of writing script for a computer program or mobile device.

(c) "Educator" means the same as that term is defined in Section [53A-6-103](#).

(d) "Endorsement" means a stipulation, authorized by the State Board of Education and appended to a license, that specifies the areas of practice to which the license applies.

(e) (i) "Institution of higher education" means the same as that term is defined in Section [53B-3-102](#).

(ii) "Institution of higher education" includes the Utah College of Applied Technology.

(f) "Employer" means a private employer, public employer, industry association, union, or the military.

(g) "License" means the same as that term is defined in Section [53A-6-103](#).

(h) "Stackable sequence of credentials" means a sequence of credentials that:

(i) an individual can build upon to access an advanced job or higher wage;

(ii) is part of a career pathway system;

(iii) provides a pathway culminating in the equivalent of an associate's or bachelor's degree;

(iv) facilitates multiple exit and entry points; and

(v) recognizes sub-goals or momentum points.

(2) On behalf of the board, the staff of the board and the staff of the State Board of Education shall collaborate to develop and implement a computer science initiative for public schools by:

(a) creating an online repository that:

(i) is available for school districts and charter schools to use as a resource; and

(ii) includes high quality computer science instructional resources that are designed to teach students in all grade levels:

(A) computational thinking skills; and

(B) computer coding skills;

(b) providing for professional development on teaching computer science by:

(i) including resources for educators related to teaching computational thinking and computer coding in the STEM education high quality professional development application described in Section [63N-12-210](#); and

(ii) providing statewide or regional professional development institutes; and

(c) awarding grants to a school district or charter school, on a competitive basis, that may be used for the purposes described in Subsection (4).

(3) A school district or charter school may enter into an agreement with one or more of the following entities to jointly apply for a grant under Subsection (2)(c):

(a) a school district;

(b) a charter school;

(c) an employer;

(d) an institution of higher education; or

(e) a non-profit organization.

(4) A grant described in Subsection (2)(c) may be used for the following purposes related to computer science:

(a) providing incentives for an educator to earn a computer science endorsement;

(b) conducting industry engagement activities;

(c) providing face-to-face mentoring, coaching, or training;

(d) creating a stackable sequence of credentials; or

(e) conducting student outreach, recruitment, and retention efforts.

(5) To apply for a grant described in Subsection (2)(c), a school district or charter

school shall submit a plan to the State Board of Education for the use of the grant, including a statement of purpose that describes the learning objectives, goals, and measurable outcomes the school district or charter school will accomplish by conducting one or more of the purposes described in Subsection (4).

(6) The board and the State Board of Education shall encourage schools to independently pursue computer science and coding initiatives, subject to local school board or charter school governing board approval, based on the unique needs of the school's students.

(7) The board shall include information on the status of the computer science initiative in the annual report described in Section [63N-12-208](#).

Section 2. **Appropriation.**

Under the terms and conditions of Title 63J, Chapter 1, Budgetary Procedures Act, for the fiscal year beginning July 1, 2016, and ending June 30, 2017, the following sums of money are appropriated from resources not otherwise appropriated, or reduced from amounts previously appropriated, out of the funds or amounts indicated. These sums of money are in addition to amounts previously appropriated for fiscal year 2017.

To State Board of Education -- State Office of Education -- Initiative Programs

<u>From Education Fund</u>	<u>\$630,000</u>
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Schedule of Programs:

<u>Computer Science Initiative</u>	<u>\$630,000</u>
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To Governor's Office of Economic Development — STEM Action Center

<u>From General Fund</u>	<u>\$140,000</u>
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Schedule of Programs:

<u>STEM Action Center</u>	<u>\$140,000</u>
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The Legislature intends that:

(1) the State Board of Education use:

(a) at least \$620,000 of the appropriation provided in this section for grants described in Subsection [63N-12-213](#)(2)(c), including at least \$320,000 for providing incentives described in Subsection [63N-12-213](#)(4)(a); and

(b) up to \$10,000 of the appropriation provided in this section for administration of the initiative described in Section [63N-12-213](#);

(2) the Governor's Office of Economic Development use the appropriation provided in

119 this section to meet the requirements described in Subsections [63N-12-213](#)(2)(a) and (b); and
120 (3) under Section [63J-1-603](#), appropriations under this section not lapse at the close of
121 fiscal year 2017.

122 Section 3. **Effective date.**

123 If approved by two-thirds of all the members elected to each house, this bill takes effect
124 upon approval by the governor, or the day following the constitutional time limit of Utah
125 Constitution, Article VII, Section 8, without the governor's signature, or in the case of a veto,
126 the date of veto override.